- 30 second drive coil (second magnetic means)
- 32 first magnetic body (a part of the second magnetic means)
- 33 pressure sensitive adhesive sheet (adhesive)
- second magnetic body (a part of the second magnetic means)
- 35 pressure sensitive adhesive sheet (adhesive)
- protruding edge (regulating part, abutting part)
- 42 second divided case body (half case body)
- 42c ring-shaped groove
- 44 imaging element
- 10 45 circuit board
 - 76 spacer
 - g1 gap (largest gap length)

WHAT IS CLAIMED IS:

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- 1. A lens drive device comprising a movable lens body provided with a lens, a drive means for moving the movable lens body in an optical axis direction of the lens, and a fixing body which movably supports the movable lens body in the optical axis direction,
- characterized in that, the movable lens body is comprised of a lens-barrel provided with a lens and a lens-barrel holder which movably supports the lens-barrel in the optical axis direction, the lens-barrel holder comprises a first magnetic means as the drive means, the fixing body comprises a second magnetic means as the drive means and a regulating part which regulates a moving range in the optical axis direction of the lens-barrel holder, and the movable lens body is moved by a magnetic attractive force or a magnetic repulsive force between the first magnetic means and the second magnetic means.
- 30 2. The lens drive device according to claim 1, wherein the lens-barrel holder is formed in a cylindrical shape and a female screw part is formed on its inner periphery, and a male screw part is formed on an outer periphery of the lens-barrel and the male screw part is threadedly engaged with the female screw part, and the lens-barrel is moved in the optical axis direction by relatively turning the lens-barrel holder with respect to the lens-barrel.

3. A manufacturing method for manufacturing the lens drive device as recited in claim 1 or 2, comprising:

preparing a case body as the fixing body in which the movable lens body is accommodated inside of the case body, the case body being structured to be capable of being divided into at least two portions such that respective portions are formed as half case bodies,

abutting the lens-barrel holder with an abutting part as the regulating part which is provided in one of the half case bodies,

relatively moving the one of the half case bodies and the other half case body in the optical axis direction such that a spacer is sandwiched between an abutting part as the regulating part provided in the other half case body and the lens-barrel holder,

after that, fixing the one of the half case bodies and the other half case body each other, and

after that, pulling out the spacer.

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4. A manufacturing method for manufacturing the lens drive device as recited in claim 1 or 2, comprising:

preparing a case body as the fixing body in which the movable lens body is accommodated inside of the case body, the case body being structured to be capable of being divided into at least two portions such that respective portions are formed as half case bodies,

providing abutting parts as the regulating parts for interposing the lens-barrel holder on one of the half case bodies and the other half case body respectively,

adjusting a gap space between the abutting parts,

after that, fixing the one of the half case bodies and the other half case body each other,

then, fixing an imaging element where an image transmitted through the lens is image-formed to the half case body,

after that, relatively moving the lens-barrel and the lens-barrel holder in the optical axis direction to adjust a focus of the lens to the imaging element.